

DEFENSE INFORMATION SYSTEM AGENCY

STATEMENT OF WORK

as of 15-Jun-99

BACKGROUND

Many of the Nation's Historically Black Colleges and Universities (HBCU) and Minority Institutions (MI) have the resources, technical strengths, and capabilities to provide the Department of Defense (DOD) with high-level technical support services that are needed to sustain and advance DOD technology programs.

The Minority Institutions Technology Support Services (MITSS) contracts will provide the Department analytical, engineering, logistical, communications, integration, computer systems research and development, application software development, testing and maintenance, information assurance, and education and training services. These services may include benchmarking, baselining, acquisition planning, risk assessments, evaluations of cost and performance benefits of alternative approaches, information systems analysis on conceptual, proposed, and/or existing information and communication systems and architectures which include mathematical computations, operations research, simulation, modeling and other scientific techniques.

The MITSS contracts provide technical support at all DISA locations and other DOD locations in the Continental United States (CONUS) and Outside CONUS (OCONUS). One hundred percent (100%) of these prime contracts will be awarded to eligible HBCU/MI and all Military Service and Defense Agency contracting offices may place task orders (TO) against them.

The Defense Information Systems Agency (DISA) will manage the MITSS contracts and provide affordable, professional, modern, performance results-driven administration of these contracts in accordance with applicable laws, regulations, and guidance.

1.0 DISA Program Points of Contact:

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2.0 Background: The DOD has a continuing requirement to provide high-quality, information technology based products and services covering a wide range of programs, systems, organizations, and people to support Command, Control, Communications, Computer, and Intelligence for the Warrior (C4IFTW). In order to manage its complex technical infrastructure and maintain information superiority, DOD must have access to a sustaining cadre of highly skilled resources. Furthermore, this challenge requires DOD to have extensive partnerships with Industry, as well as post-secondary Academia to maintain advances in technology and training. This ID/IQ contract for information technology (IT), telecommunications and related services will ensure timely access to highly-qualified Academia resources that are available to support DOD requirements upon demand. This type of contract vehicle is especially needed as the Department moves from the non-integrated collection of stovepipe systems and architectures to a more integrated and modern IT environment.

3.0 Objective: The objective of this Statement of Work (SOW) is to outline the technical support requirements for a multiple award, indefinite delivery/indefinite quantity (ID/IQ) task order driven procurement to obtain technical services from designated Historically Black Colleges and Universities and Minority Institutions. The contract is available to DISA, Military Services, and other Defense Agencies.

4.0 Scope: The baseline requirement for this procurement is for Historically Black Colleges and Universities and Minority Institutions with a broad range of IT services and solutions, in areas such as: computer and communication systems, networks, software development and testing, satellites, evaluating life-cycle cost, technical education and training development, and to satisfy end user technical requirements. The overall purpose is for Historically Black Colleges and Universities/Minority

Institutions, hereinafter, referred to as the Contractor, to provide a wide range of technical support, studies and analysis and training services to facilitate the migration of DOD legacy information systems, networks, and standard data into an integrated and interoperable Defense Information Infrastructure (DII). The Contractor may be tasked to provide IT and a telecommunications service for activities throughout all operating levels within the DOD. The Contractor shall have the ability to propose subcontracts needed that are beyond the Contractor's immediate abilities; however, the subcontractor(s) must be another HBCU/MI and/or small business. The Government shall not disqualify offers and/or resulting prime contracts merely because one subcontractor appears on one or more offers and/or resulting MITSS contracts as this is a private matter that is handled between prime and subcontractors. The scope includes the 13 task areas identified under paragraph 5.0 below.

5.0 TASK/TECHNICAL REQUIREMENTS: The Contractor, shall in the time and in the manner specifically set forth in task orders (TO), furnish personnel, management, supervision, facilities, transportation, communications, and all other resources necessary for the required support. TO may relate to a single task area or may involve functions from multiple task areas. TO will be issued to activate tasks and provide the specific details of the technical requirements, applicable standards, government furnished equipment, government furnished information, and any other relevant guidance. The Contractor shall provide technical support in each of the following 13 task areas:

5.1 Task Area 1: Program and Task Order Management. This task area involves the preparation of program management plans at the start of the contract and task management at the initiation of each TO. These plans shall describe the administrative functions, technical approach, organizational resources, management controls, and quality assurance monitoring that the contractor shall employ to meet the cost, performance and schedule requirements throughout the contract period of performance. This task area also includes the delivery of monthly contract status reports to monitor the execution awarded task orders, as well as, periodic in-progress performance reviews. Performance reviews will be conducted at the times and places identified by the government. To reduce travel costs, meetings via video teleconference will be encouraged. TO management also entails the daily activities required for successful task order completion such as supervision, quality assurance monitoring, configuration management, and security management.

5.2 Task Area 2: Systems Engineering. This task involves engineering support for the planning, design, development,

testing, integration, installation, operation and maintenance of computers and computer systems, and applications in various DOD environments including Defense Mega-Center, mid-tier, Metropolitan Area Networks (MAN), and Local Area Network (LAN) environments. The Contractor shall provide technical staffing to support system engineering, software integration engineering, computer hardware engineering, and information/data engineering. This task also includes reviewing and/or developing operational and technical systems requirements, preparation of technical documentation on engineering issues, technical opinions on current and/or proposed engineering efforts, operational planning for engineering activities, and review of engineering policy, practices, and processes.

5.3 Task Area 3: Telecommunications. This task involves supporting various network control/communications center operations, and analyzing hardware and software interoperability (including protocols, network management and multimedia applications) across conventional networks, hybrid fiber-coaxial networks, Integrated Services Digital Networks, and Asynchronous Transfer Mode (ATM) networks. The Contractor shall provide technical staffing to support system & network design engineering, using engineering Computer Aided Design, network topological design tools, and operating design tools. The Contractor shall have the ability to perform rapid prototyping and provide engineering support to demonstrate, assess, and implement new telecommunications technologies. This task area also includes conducting site surveys, preparing engineering design plans, engineering configuration management, and related documentation for designated systems/networks.

5.4 Task Area 4: Acquisition Management. This task includes support services necessary to develop acquisition documentation, acquisition plans, statements of work, solicitations or requests for proposals, evaluation plans, and any other documentation necessary to solicit, evaluate and award a contract to meet Government requirements. The Contractor may be required to provide technical assistance for development or review of on-going system acquisition programs, logistics support services, and facilities and space management programs. The Contract may be required to support efforts to streamline procurement and services processes, including the development of automation tools to support acquisition initiatives. The Contractor may also be required to support the planning and execution of post-award administrative support activities, such as, post-award and past performance evaluation systems and conferences.

5.5 Task Area 5: Software, Computer Systems and Network Applications Development and Support. This task involves requirements analysis, planning, overseeing, development, design

and code changes, and maintenance of new computer applications and conversion of legacy systems to migration or standard applications. This task area also includes support to convert and test software to run on new hardware platforms, coordination of change implementation through appropriate approvals, user notifications, preparation of documentation, and conducting acceptance testing of new and migration applications. This task area also covers support services to operate a customer support function to include, but not limited to, a help-desk facility; dial-up access to provide information, tools, techniques and procedures to assist application users at all levels; automated support for management of the customer service function; problem reporting and resolution of customer problems; and support to new and existing customer information and support centers.

5.6 Task Area 6: Systems Evaluation, Integration and Testing Services. This task entails the identification of hardware and software support packages required to conduct tests; detailed review of test and acceptance plans for compliance with specific standards; the development of milestone schedules for pretest activities; i.e., development of test scenarios, test cases, test condition requirements, and benchmark test data bases and files. For task orders that require the development of a system, the Contractor must prepare a Test and Evaluation Master Plan for approval by the government. The plan will be a living document and will be updated throughout the development and deployment process in concert with all relevant parties. Emphasis on testing is highly recommended to validate the user's requirements as early as possible in the development process, and to identify problems at the earliest possible time.

5.7 Task Area 7: Program and Information Management. This task area requires the Contractor to support or manage a program/project from inception to deployment. The Contractor is expected to initiate and manage technical and functional activities that may include but not limited to strategic planning, financial management, contracting, quality assurance, configuration management, workflow management, productivity, human engineering, and recommending opportunities for resolving program/project issues. This includes describing the technical approach, organizational resources and management controls to be employed to meet the cost, performance and schedule requirements throughout program/project execution and life cycle.

5.8 Task Area 8: Information Systems Security and Information Assurance. This task area requires the contractor to assist DOD in protecting its information systems against unauthorized access to or modification of information that is stored, processed, or in transit, and against the denial of service to unauthorized users, including measures necessary to detect, track, and counter

intrusion. This includes providing for restoration of information systems by incorporating protection, detection, and reaction capabilities. The Contractor shall also provide support in annual certification to Information System Security Officer (ISSO). The Contractor provide technical staffing to support an information systems security program by providing such support as: developing conceptual plans to assist in the certification and accreditation (C&A) of DOD information systems, including monitoring compliance with C&A standards within DOD to ensure uniform application of the standards and consistency in security of accredited DOD information systems. The contractor shall also provide technical staffing support to detect, test, and validate malicious code (i.e., viruses, worms, and Trojan Horses), as well as, intrusion detection and remediation of malicious hacker attacks on DOD networks.

5.9 Task Area 9: Modeling and Simulation. This task area entails technical services to support DOD modeling and simulation (M&S) application development, testing, in compliance with the High Level Architecture (HLA) policy. The Contractor shall provide technical staffing to support HLA software efforts, including federation development tools, HLA Interface Specifications, Object Model Template Specification, and Compliance Testing. This task also includes developing operational network performance assessments and scenario assessments to validate communications bandwidth usage (e.g., voice, data, imagery), and leading edge virtual reality techniques that could be applied to the prototyping of any project within the scope of this contract.

5.10 Task Area 10: Electronic Commerce/Electronic Business. This task involves using information technology mechanisms (e.g. computers, the Internet, and shared software) to transmit data, in order to communicate to customers, suppliers, employees or the public. It entails electronic transactions from point-of-sale requirements and production scheduling through invoicing, payment and receipt, using standards and technologies such as, Electronic Data Interchange (EDI), Technical Data Interchange (TDI), Hypertext Markup Language, and expertise to implement digital signature technologies. The Contractor shall provide technical staffing support to analyze, design, prototype, implement, test, document, and field Electronic Commerce Processing Node (ECPN) software, including EDI support services such as, certification, installation, ANSI X.12 mapping, programming, implementation and software maintenance.

5.11 Task Area 11: Information Technology Training. This task may include general orientation up to and including in-depth IT, engineering, and communications training. The type and degree of

training shall depend on the category of personnel to be trained (e.g., executives, software engineers, programmers, etc.) and on particular training objectives which will be identified in individual task orders. The Contractor shall research and prepare training plans, develop training curricula and materials, and conduct training sessions at government sites, contractor locations or combination thereof. The Contractor shall by request provide recommendations, develop, and execute training approaches to include, distance training, centralized, regional, on-site, train-the-trainer, and train-the-end-user. Training materials may also include audio, video, and computer-based.

5.12 Task Area 12: Studies in Advanced Information Technologies. This task area requires the Contractor to conduct advanced research and studies in IT areas such as data analysis, information processing, transport, dissemination, risk assessments on hardware and software systems for Y2K compliance, next generation Internet, enabling "plug-and-play" across platforms, and ways to insure rapid insertion of technology before it becomes obsolete. This task area may also include studies on necessary manpower, equipment, and dollar resources to operate and maintain specific programs and systems, including special engineering studies, and studies to determine the costs associated with making major changes on technologies in use or planned.

5.13 Task Area 13: Business Process Reengineering. This task involves analysis of organization goals, objectives, structures, business practices, data, systems, and personnel for the purpose of executing a ground-up review and redesign to streamline and enhance program/project under review. The Contractor shall examine business and technical issues and present a business case to identify non-value added costs or processes, and recommend effective solutions to reduce operating time and/or cost. This includes the development of Functional Economic Analyses to document potential savings and the development of performance measures.

6.0 PERSONNEL CONSIDERATIONS.

The qualifications of any personnel provided by the contractor for these services shall meet the minimum qualifications as stated in this section.

Resumes. The Contractor shall provide resumes of all faculty, staff, and graduate students to the Government for review for those professional and technical personnel available to be assigned to task orders. The Contractor shall ensure that the professional and technical personnel have sufficient qualifications to perform work as required by the government. The contractor's designated key personnel shall be assigned for

the duration of each task order. In the event the contractor has to replace these key personnel, the contractor shall advise the contracting office in advance of any required replacement(s).

6.1 Project Manager. Duties: Shall serve as the Contractor's Contract Manager, and shall be the contractor's authorized point of contact with the government Contracting Officer (KO), the Contracting Officer's Representative (COR) and the Task Monitor (TM). Interfaces with government management personnel, contract managers, and customer agency representatives. Responsible for formulating and enforcing work standards, assigning contractor schedules, reviewing work quality, communicating policies, purposes, and goals of the organization to subordinates. Shall be available to manage contract performance and shall not serve in any other capacity under this contract. Experience is required in project development from inception to deployment, with a demonstrated ability to provide guidance and direction in the tasks similar to the sample tasks provided in the statement of work. Proven expertise in the management and control of funds and resources to include but not limited to all financial management and administrative activities, such as budgeting, manpower, and resource planning and financial reporting. May perform complex evaluations of existing procedures, processes, techniques, models, and/or systems related to management problems or contractual issues, which would require a report and recommend solutions. Prepare charts, tables, graphs, and diagrams to assist in analyzing problems. Provides daily supervision and direction to team. Qualifications: Must possess a Ph.D. in Computer Science, Information System, or other closely related discipline.

6.2 Project Leader. Duties: Project Leader must have proven management skills and technical expertise in the subject matter of the task order. A proven track record of leading technical and training projects that involve the successful management of teams composed of IT professionals and students that have expertise in analysis, design, integration, testing, documenting, converting, extending, and implementing automated information and communication systems. Directs all financial management and administrative activities, such as budgeting, manpower, resource planning, and financial reporting. Performs complex evaluations of existing procedures, processes, techniques, models, and/or systems related to management problems or contractual issues that require a report and recommended solutions. Develops work breakdown structures, prepare charts, tables, graphs, and diagrams to assist in analyzing problems. Provides daily supervision and direction to staff. Qualifications: Project Leader shall have at least a Masters Degree from an accredited institution and a minimum of 3 years as a supervisor or team leader.

6.3 Senior Computer Scientist. Duties: Performs assignments in the general areas of computer hardware and software such as, analysis of computer systems, protocols, computer operations, programming, database structuring and management, and evaluation of computer test plans and procedures. Translates user requirements into hardware, software, and communications requirements and solutions. Prepares milestone status reports and deliveries/presentations on the system concept to colleagues, subordinates, and end user representatives.

1. 3GL and 4GL programming languages (e.g., Ada, C+, C++)
2. 4GL, object oriented, client server technology (e.g., Visual Basic, C++)
3. Database technology (e.g., RDBMS (e.g., INGRES), ODBMS, SQL, MS ACCESS, ODBC)
4. Network Operating Systems (e.g., Windows NT, UNIX)
5. Electronic publishing tools, techniques, and environments (e.g., Folio Views, MS WOSA)
6. Internet Web technology, such as design and implementation of Web pages and servers.

Qualifications: 1) Master's Degree in Computer Science, Engineering, Information Systems, or other closely related scientific or technical discipline and minimum eight years general experience of which six years must be specialized experience; or 2) Bachelor's degree in Computer Science, Engineering, Information Systems, or other closely related scientific or technical discipline and minimum ten years general experience of which eight years must be specialized experience; or 3) Twelve years general experience in closely related scientific or technical discipline of which 10 years must be specialized experience.

6.4 Senior Software Engineer. Duties: Provides technical and administrative direction for personnel performing software development tasks, including the review of work products for correctness, adherence to the design concept and to user standards, and for progress in accordance with schedules. Coordinates with the Project Manager to ensure problem solution and user satisfaction. Prepares milestone status reports and deliveries/presentations on the system concept to colleagues, subordinates, and end user representatives. Work may require expertise in the following areas:

1. 3GL and 4GL programming languages (e.g., Ada, C+, C++)
2. 4GL, object oriented, client server technology (e.g., Visual Basic, C++)
3. Database technology (e.g., RDBMS (e.g., INGRES), ODBMS, SQL, MS ACCESS, ODBC)

4. Network Operating Systems (e.g., Windows NT, UNIX)
5. Electronic publishing tools, techniques, and environments (e.g., Folio Views, MS WOSA)
6. Internet Web technology, such as design and implementation of Web pages and servers.

Qualifications: 1) Master's Degree in Engineering, Computer Science, Information Systems, or other closely related scientific or technical discipline and minimum eight years general experience of which six years must be specialized experience; or 2) Bachelor's degree in Engineering, Computer Science, Information Systems, or other closely related scientific or technical discipline and minimum ten years general experience of which eight years must be specialized experience; or 3) Twelve years general experience in closely related scientific or technical discipline of which 10 years must be specialized experience.

6.5 Senior Logistics Specialist. Duties: Applies software, hardware, and standards information technology skills in the analysis, specification, development, integration, and acquisition of open systems Information Management (IM) applications. Ensures these systems and applications are compliant with standards for open systems architectures, reference models, and profiles of standards. For example, the IEEE Open Systems Environment (OSE) reference model as they apply to the implementation and specification of IM solutions on the application platform, across the application program interface (API), and the external environment/software application. Evaluates and recommends COTS applications and methodologies that can be acquired to provide interoperable, portable, and scalable information technology solutions. Performs analysis and validation of reusable software/hardware components to ensure the integration of these components into interoperable IM designs. Qualifications: 1) Master's Degree in Engineering, Computer Science, Business, Mathematics, Information Systems, or other closely related scientific or technical discipline and minimum eight years general experience of which six years must be specialized experience; or 2) Bachelor's degree in Engineering, Computer Science, Information Systems, or other closely related scientific or technical discipline and minimum ten years general experience of which eight years must be specialized experience; or 3) Twelve years general experience in closely related scientific or technical discipline of which 10 years must be specialized experience.

6.6 Senior Training Specialist. Duties: Conducts the research necessary to develop and revise training courses. Develops and revises these courses and prepares appropriate training catalogs. Prepares instructor materials (course outline, background

material, and training aids). Prepares student materials (course manuals, workbooks, handouts, completion certificates, and course critique forms). Trains personnel by conducting formal classroom courses, workshops, and seminars. Qualifications: 1) Master's Degree in Education, Business, Computer Science, Engineering, Information Systems, or other closely related scientific or technical discipline and minimum eight years general experience of which six years must be specialized experience; or 2) Bachelor's degree in Education, Business, Engineering, Computer Science, Information Systems, or other closely related scientific or technical discipline and minimum ten years general experience of which eight years must be specialized experience; or 3) Twelve years general experience in closely related scientific or technical discipline of which 10 years must be specialized experience.

6.7 Senior Systems Programmer. Duties: Provides technical and administrative direction for personnel performing system software programmer tasks, including the review of work products for correctness, adherence to the standardized operational environment design concepts, operational guidelines, and standard procedures; and for progress in accordance with schedules. Coordinates with the Project or Program Manager to ensure problem resolution and user satisfaction. Applies software, hardware, and interface standards information technology skills in the analysis, specification, development, integration and acquisition of systems software for Department of Defense information processing platforms. Performs professional system software engineering assignments in support of C4I efforts in one or more of the following disciplines: computer/communications engineering, computer/communications security, network analysis, interoperability analysis, systems standards, military support operations (e.g. finance, logistics, and personnel), program analysis, program planning and cost analysis. Knowledgeable of COTS products and methods that can be acquired to provide interoperable, portable, and scalable information technology solutions. Makes recommendations, if needed, for approval of major systems installations. Prepares milestone status reports and deliveries/presentations on the system concepts to colleagues, subordinates and end user representatives. Provides daily supervision and direction to support staff. Qualifications: 1) Master's Degree in Computer Engineering, Systems Engineering, Computer Science, Information Systems, or other closely related scientific or technical discipline and minimum eight years general experience of which six years must be specialized experience; or 2) Bachelor's degree in Computer Engineering, Systems Engineering, Computer Science, Engineering, Information Systems, or other closely related scientific or technical discipline and minimum ten years general experience of which eight years must be specialized experience; or 3) Twelve years

general experience in closely related scientific or technical discipline of which 10 years must be specialized experience.

6.8 Senior Systems Architect. Duties: Establishes system information requirements using analysis of the information engineer(s) in the development of enterprise-wide or large-scale information systems. Designs architecture to include the software, hardware, and communications to support the total requirements, as well as, provide for present and future cross-functional requirements and interfaces. Ensures these systems are compatible and in compliance with the standards for open systems architectures, the Open Systems Interconnection (OSI) and International Standards Organization (ISO) reference models, and profiles of standards - such as Institute of Electrical and Electronic Engineers (IEEE) Open Systems Environments (OSE) reference model - as they apply to the implementation and specification of Information Management (IM) solution of the application platform, across the application program interface (API), and the external environment/software application. Ensures that the common operating environment is TAFIM compliant. Evaluates analytically and systematically problems of workflow, organization, and planning and develops appropriate corrective action. Has ability to adapt to new situations and environments. Possesses keen troubleshooting skills to assist other Senior Systems Analysts and Program Analysts. Qualifications: 1) Master's Degree in Systems Engineering, Network Engineering, Computer Science, or other closely related scientific or technical discipline and minimum eight years general experience of which six years must be specialized experience; or 2) Bachelor's degree in Systems Engineering, Network Engineering, Computer Science, or other closely related scientific or technical discipline and minimum ten years general experience of which eight years must be specialized experience; or 3) Twelve years general experience in closely related scientific or technical discipline of which 10 years must be specialized experience.

6.9 Senior Applications Programmer. Duties: Manages the design of software tools and subsystems to support reuse and domain analysis. Directs Application Engineer and Applications Programmer to interpret software requirements and design specifications to code, and integrate and test software components. Qualifications: 1) Master's Degree in Computer Programming, Systems Engineering, Computer Science, Computer Information Systems, or other closely related scientific or technical discipline and minimum eight years general experience of which six years must be specialized experience; or 2) Bachelor's degree in Computer Programming, Systems Engineering, Computer Science, Computer Information Systems, or other closely related scientific or technical discipline and minimum ten years

general experience of which eight years must be specialized experience; or 3) Twelve years general experience in closely related scientific or technical discipline of which 10 years must be specialized experience.

6.10 Junior Computer Scientist. Duties: Performs assignments in the general areas of computer hardware and software such as: analysis of computer systems, protocols, computer operations, programming, database structuring and management, and evaluation of computer test plans and procedures. Translates user requirements into hardware, software, and communications requirements and solutions. Prepares milestone status reports and deliveries/presentations on the system concept to colleagues, subordinates, and end user representatives. Work may require expertise in the following areas:

1. 3GL and 4GL programming languages (e.g., Ada, C+, C++)
2. 4GL, object oriented, client server technology (e.g., Visual Basic, C++)
3. Database technology (e.g., RDBMS (e.g., INGRES), ODBMS, SQL, MS ACCESS, ODBC)
4. Network Operating Systems (e.g., Windows NT, UNIX)
5. Electronic publishing tools, techniques, and environments (e.g., Folio Views, MS WOSA)
6. Internet Web technology, such as design and implementation of Web pages and servers.

Qualifications: At a minimum, students must be a Junior in good academic standing.

6.11 Junior Software Engineer. Duties: Provides technical and administrative direction for personnel performing software development tasks, including the review of work products for correctness, adherence to the design concept and to user standards, and for progress in accordance with schedules. Coordinates with the Project Manager to ensure problem solution and user satisfaction. Work may require expertise in the following areas:

1. 3GL and 4GL programming languages (e.g., Ada, C+, C++)
2. 4GL, object oriented, client server technology (e.g., Visual Basic, C++)
3. Database technology (e.g., RDBMS (e.g., INGRES), ODBMS, SQL, MS ACCESS, ODBC)
4. Network Operating Systems (e.g., Windows NT, UNIX)
5. Electronic publishing tools, techniques, and environments (e.g., Folio Views, MS WOSA)
6. Internet Web technology, such as design and implementation of Web pages and servers.

Qualifications: At a minimum, students must be a Junior in good academic standing.

6.12 Junior Applications Programmer. Duties: Participates in the design of software tools and subsystems to support reuse and domain analysis. Assists Application Engineer and Applications Programmer to interpret software requirements and design specifications to code, and integrate and test software components. Qualifications: Enrolled in either Computer Science, Information Systems, Engineering, Business, or other related scientific or technical disciplines. At a minimum, students must be a Junior in good academic standing.

6.13 Applications Programmer. Duties: The incumbent analyzes functional business applications and design specifications for functional activities. Develops block diagrams and logic flow charts. Translates detail design into computer software. Tests, debugs, and refines the computer software to produce the required product. Prepares required documentation, including both program-level and user-level documentation. Enhances software to reduce operating time or improve efficiency. Provides technical direction to programmers to ensure program deadlines are met. Qualifications: Enrolled in either Computer Science, Information Systems, Engineering, Business, or other related scientific or technical disciplines. At a minimum, students must be a Junior in good academic standing.

6.14 Hardware Design Engineer. Duties: Reviews computer systems in terms of machine capabilities and man-machine interface. Prepares reports and studies concerning hardware. Prepares functional requirements and specifications for hardware acquisitions. Ensures that problems have been properly identified and solutions will satisfy the user's requirements. Qualifications: Engineering, Computer Science, Information System, or closely related discipline graduate student in good academic standing.

6.15 Network Engineer. Duties: Analyzes and develops computer software possessing a wide range of capabilities, including numerous engineering, business, and records management functions. Develops plans for Automated Data Processing (ADP) systems from project inception to conclusion. Analyzes the problem and the information to be processed. Defines the problem, and develops system requirements and program specifications, from which programmers prepare detailed flow charts, programs, and tests. Coordinates closely with programmers to ensure proper implementation of program and system specifications. Develops, in conjunction with functional users, system alternative solutions. Qualifications: Engineering, Computer Science, Information

System, or closely related discipline graduate student in good academic standing.

6.16 Quality Assurance Engineer. Duties: Must have proven analytical ability combined with knowledge and application of quality assurance principles and techniques, and knowledge of pertinent project characteristics and the associated development processes and techniques. Will develop plans and programs for achieving and maintaining product quality throughout the project's life cycle. Monitor operations to prevent defects and to verify adherence to project plans and requirements. Investigate and analyze adverse quality trends or conditions and initiate corrective action. Qualifications: At a minimum, the Engineering student must be a Junior in good academic standing.

6.17 Systems Engineer. Duties: Performs professional engineering assignments in support of Task Order engineering efforts in one or more of the following disciplines: communications engineering, electronic engineering, communications security, network analysis, interoperability analysis, system standards, program analysis, program planning, and cost analysis. Qualifications: At a minimum, the Engineering student must be a Junior in good academic standing.

6.18 Systems Administrator. Duties: Supervises and manages the daily activities of configuration and operation of business systems which may be mainframe, mini, or client/server based. Optimizes system operation and resource utilization, and performs system capacity analysis and planning. Provides assistance to users in accessing and using business systems. Qualifications: Enrolled in either a Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline. At a minimum, students must be a Junior in good academic standing.

6.19 Data Base Management Specialist. Duties: Provides highly technical expertise in the use of DBMS. Evaluates and recommends available DBMS products to support validated user requirements. Defines file organization, indexing methods, and security procedures for specific user applications. Qualifications: Enrolled in either Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline. At a minimum, students must be a Junior in good academic standing.

6.20 Graduate Business Student. Duties: Include analysis, planning, establishment of requirements, development of procedures, and other related management and technical duties. Provides technical and administrative direction for personnel performing software development tasks, including the review of

work products for correctness, adherence to the design concept and to user standards, review of program documentation to assure government standards/requirements are adhered to, and for progress in accordance with schedules. Coordinates with the Project Manager to ensure problem solution and user satisfaction. Prepares milestone status reports and deliveries/presentations on the project to sponsor, team members, and others. Qualifications: Business graduate student in good academic standing.

6.21 Provisioning/Contract Specialist. Duties: Must be knowledgeable in business and industrial practices, procedures, and systems for the management and control of Government-owned property. Experienced in the administration of contract provisions relating to control of Government property in the possession of contractors, from acquisition through disposition. Qualifications: Must have a Business or Related Degree from an accredited institution and a minimum of 3 years experience administering contracts.

6.22 Documentation Specialist. Duties: Gathers, analyzes, and composes technical information. Conducts research and ensure the use of proper technical terminology. Translates technical information into clear, readable documents to be used by technical and non-technical personnel. Qualifications: At a minimum, students must be a Junior in good academic standing.

6.23 Information Specialist. Duties: Applies, as appropriate, activity and data modeling, transaction flow analysis, internal control and risk analysis, and performance measurement techniques. Assists in establishing project standards for information systems procedures. Develops and applies project information models for use in designing and building an integrated project. Constructs sound, logical, and cost saving business improvement opportunities consistent project guidelines. Prepares milestone status reports and deliveries/presentations on the project to sponsor, team members, and others. Qualifications: At a minimum, students must be a Junior in good academic standing.

6.24 Inventory Control/Warehouse Specialist. Duties: Performs receipt, storage, issue, and preservation of supplies and equipment. Responsibilities are as follows, but not limited to:

- Establishes and maintains stock locator records. Receives stock shipments, reviews and verifies quantities received against bills of lading/purchase requests and shipping documentation, prepares stock locator data, and palletizes and stores incoming supplies and equipment.

- Packs, crates, stencils, weighs, bands equipment and supplies for shipment, and prepares shipment documentation.
- Performs stock replenishment actions.
- Implements stock security measures.

Qualifications: Minimum of 2 years experience in inventory control and warehouse management.

6.25 Publication Specialist. Duties: Collects and organizes information in the preparation of user manuals, training materials, installation guides, proposals, and reports. Edits functional descriptions, system specifications, user manuals, special reports, or any other customer deliverables and documents. Qualifications: Business, Marketing, or closely related discipline, and at a minimum, students must be a Junior in good academic standing. Non-students must have a minimum of 2 years experience with specified duties.

6.26 Quality Assurance Specialist. Duties: Using analytical and evaluative methods and techniques for assessing program development and execution performs quality checks on the project's objectives and processes. Results of fact finding will be in written report form and graphical presentations when required. Qualifications: Business, Marketing, or closely related discipline, and at a minimum, students must be a Junior in good academic standing. Non-students must have a minimum of 2 years experience with specified duties.

6.27 Research Specialist. Duties: Technical and operations research advisor to Program Manager, as well as, to other analysts and team members. Organizes and conducts analytical, economic, and technical studies for the project. Performs statistical analysis and data interpretation. Briefs project sponsors and/or others on progress and conclusions of studies and analyses. Documents study purposes, methods, premises, and conclusions. Participates in development of study plans. Plans, designs, conduct, or monitor tests to obtain data. Participates in problem definition and refinement. Compiles, organizes and analyzes data. Determines sample sizes and sources of data for studies. Also, determines measures of effectiveness to solve problems. Selects critical elements of real world systems for inclusion in models. Selects equations or algorithms relevant to real world environments. Obtains and evaluates data for use as necessary in future simulations. Qualifications: Must be a graduate student in good academic standing.

6.28 Communications Specialist. Duties: Analyzes network characteristics (e.g., traffic, connect time, transmission speeds, packet sizes, and throughput) and recommends procurement, removals, and modifications to network components. Designs and

optimizes network topologies and site configurations. Plans installations, transitions, and cut over of network components and capabilities. Coordinates requirements with users and suppliers. Qualifications: Enrolled in Computer Science, Information Systems, Engineering, or other related scientific or technical disciplines. At a minimum, students must be a Junior in good academic standing.

6.29 Data Standardization Specialist. Duties: Provides technical support in the evaluation of prime objects names, data elements, and other objects. Evaluated proposed objects and their attributes. Ensures that proposed object definitions are clear, concise, technically correct, and that they represent singular concepts. Ensures that the values of object attributes and domains are accurate and correct. Ensures that the proposed objects are consistent with data and process models. Qualifications: Enrolled in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical disciplines. At a minimum, students must be a Junior in good academic standing.

6.30 Computer Security Specialist. Duties: Analyzes, defines and establishes security policy and procedures to meet National Industrial Security Program (NISP) requirements for facilities occupied by team members. Gathers and organizes technical information about facility missions and functions; designs standard practice procedures to satisfy the requirements of the NISP, the Cognizant Security Agency (CSA) and the Government Contracting Activity (GCA). Oversees all aspects of security within the facility. Experience in the following disciplines is necessary: Facility Security Officer functions, Sensitive Compartmented Information Facility (SCIF) Management, Information Systems Security, Service Access Point Security, Information Security, Physical Security, Personnel Security, Security Training, and Security Surveys. Qualifications: Must have a minimum of 3 years experience in information security/information assurance.

6.31 Software Test Specialist. Duties: Analyzes project information requirements and design specifications using current state-of-the-art methodologies. Performs oversight of integration and testing of individual computer software configuration items (CSCI). Supports senior staff in developing and maintaining coding standards. Participates in the development of test plans and procedures for CSCIs. Prepares required documentation, including both program- and user-level documentation. Qualifications: Engineering, Computer Science, Information System, or closely related discipline graduate student in good academic standing.

6.32 Help Desk Specialist. Duties: Provides phone and in-person support to users in the areas of e-mail, directories, standard Windows desktop applications, and applications developed under specific areas. Serves as the initial point of contact for troubleshooting hardware/software PC and printer problems. Qualifications: Enrolled in either Computer Science, Information Systems, Engineering, Business, or other related scientific or technical disciplines. At a minimum, students must be a Junior in good academic standing.

6.33 Administrative Support and Graphic Specialist. Duties: Directly supports Program Manager or Project Manager. Assists in the preparation of presentation graphics and supports the development of contract deliverables and reports by developing and updating graphic presentations to improve the quality and enhance the usability of these documents. Responsible for integrating the graphic generated with automated tools an the deliverable documents. Qualifications: A high school diploma and a minimum of two years is required in graphic presentation and one year of specialized experience using automated word processing documentation. Must be a student in good academic standing.

6.34 Technical Writer. Duties: Assists in collecting and organizing information required for preparation of user's manuals, training materials, installation guides, proposals, and reports. Edits functional descriptions, system specifications, user's manuals, special reports, or any other customer deliverables and documents. Qualifications: (1)Engineering, Computer Science, Information System, or closely related discipline and at a minimum, students must be a Junior in good academic standing, or (2) Have a minimum of 10 years of experience in a closely related technical discipline.

6.35 VTC Schedule Coordinator. Duties: Operates and administers the Contractor's Video Teleconferencing System. Also, coordinates, tests, and monitors video teleconferences between the government and Contractor staff, insuring that uninterrupted real-time interaction of participants is maintained. Qualifications: Must have a minimum of 2 years experience with specified duties.

6.36 Web Programmer. Duties: Provides technical guidance to the Program Manager and team members on the implementation and maintenance of project web site. Translates detailed web site design into code. Programs, tests, debugs, and updates web site as required. Must be proficient in HTML and Java. Prepares requires documentation, including both program and user documentation. Qualifications: Engineering, Computer Science,

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Information System, or closely related discipline, and at a minimum, students must be a Junior in good academic standing.

6.37 Administrative Support. Duties: Assists in the preparation of management plans and reports. Coordinates schedules to facilitate completion of proposals, contract deliverables, task order review, briefings/presentations, and IPR preparation. Performs analysis, development, and review of program administrative operating procedures. Qualifications: Must be a student in good academic standing. Non-student must have a minimum of 2 years experience with specified duties.

7.0 Contract Data Requirements List (CDRL) Data Item Descriptions (DIDs):

- a) CDRL A0001 Monthly Activity Report.
- b) Tasks performed within the scope of this contract shall require contract end items, research and technical reports. The data required for each task will be specified in each task order using DD Form 1423 or otherwise identified organically within the task order SOW. Many of the DIDs, which may be used during the course of the contract, are identified below. (Note that these are not at all inclusive). To obtain the DD Form 1664, refer to <http://www.acq.osd.mil/te/programs/se/cm&dm/level2/dids.html> and click on 700 service-wide DIDs in PDF forms.

DATA ITEM DESCRIPTION TITLE	ASSOCIATED DATA ITEM DESCRIPTIONS (DID'S)
Computer Operation Manual (COM)	DI-IPSC-81446
Computer Programming Manual (CPM)	DI-IPSC-81447
Computer Software Product End Items	DI-MCCR-80700
Computer Software System Document	DI-IPSC-80942
Conference Minutes	DI-ADMN-81250A
Conference Reports	DI-A-5011B
Conference Reports	DI-ADMN-81308
Contract Data Status and Schedule Report	DI-MISC-80167A
Contract Funds Status Report (CFSR)	DI-MGMT-81468
Contract Summary Report	DI-ADMN-80447
Contract Work Breakdown Structure	DI-MGMT-010
Cost Data Summary Report (DD1921)	DI-F-6006
Course Schedule	DI-028B-007
Contractor's Progress, Status and Management Report	DI-MGMT-80227

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Database Design Description (DBDD)	DI-IPSC-81437
Design Specification	DI-MCCR-81344
Firmware Support Manual (FSM)	DI-IPSC-81448
Integrated Master Schedule	DI-MISC-81183A
Interface Design Description (IDD)	DI-IPSC-81436
Materials, Bills of	UDI-P-21372
Interface Requirements Specification (IRS)	DI-IPSC-81434
Management Plan	DI-MGMT-80004
Paperless Contracting Database Specification Document	DI-MISC-80508
Operational Concept Description (OCD)	DI-IPSC-81430
Philosophy of Protection Report	DI-MISC-81348
Presentation Material	DI-ADMN-81373
Program Management Review	DI-MGMT-024
Program Progress Report	DI-MGMT-80555
Project Planning Chart	DI-MGMT-80507A
Report/Minutes, Record of Meeting	UDI-A-23083A
Scientific and Technical Report	DI-MISC-80711
Security Features User's Guide	DI-MCCR-81349
Security Test and Evaluation Plan	DI-NDTI-81351
Site Preparation Requirements and Installation Plan	DI-MGMT-80033
Site Survey Report	DI-MISC-81381
Software Center Operator Manual (SCOM)	DI-IPSC-81444
Software Design Description (SDD)	DI-IPSC-81435
Software Development Plan (SDP)	DI-IPSC-81427
Software Input/Output Manual (SIOM)	DI-IPSC-81445
Software Installation Plan (SIP)	DI-IPSC-81428
Software Product Specification (SPS)	DI-IPSC-81441
Software Requirement Specification (SRS)	DI-IPSC-81433
Software Test Description (STD)	DI-IPSC-81439
Software Test Plan (STP)	DI-IPSC-81438
Software Test Report (STR)	DI-IPSC-81440
Software Transition Plan (STrP)	DI-IPSC-81429
Software User's Manual (SUM)	DI-IPSC-81443
Software Version Description (SVD)	DI-IPSC-81442

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Studies & Analyses	DI-ENG-049
Status Report	DI-MGMT-80368
System Engineering Management Plan (SEMP)	DI-MGMT-81024
System/Subsystem Design Description (SSDD)	DI-IPSC-81432
System Integration Plan	DI-S-3563
System/Subsystem Specification	DI-IPSC-81431
Task Order Management Plan	DI-MGMT-80347
Technical Report - Study Services	DI-MISC-80508
Test Plan	DI-NDTI-80566
Test Procedure	DI-NDTI-80603
Training Materials	DI-ILSS-80872
Training Program Development & Management Plan	DI-ILSS-81070

8.0 SECURITY CONSIDERATIONS: If the contractor does not have the required clearances at time of the fair opportunity proposal/selection process he/she may be disqualified from this task order opportunity. The majority of the Contractor's work under this contract, however, will be unclassified and not possessing a SECRET or above security clearance will not necessarily preclude award of unclassified work. The need for clearances above Secret is not evident at this time. The Contractor shall ensure that all personnel, including subcontractors have obtained background investigations, which permit designation of such personnel as ADP-II (Critical Non-sensitive). The Contractor and its assigned employees shall comply with all requirements of the Privacy Act, and shall observe local government security policies and procedures while on government premises. Any sensitive information uncovered as a result of the work performed under this contract is considered government property. The Contractor shall be liable for any unauthorized disclosure by Contractor personnel of sensitive data obtained from any government source. At the government's discretion, any violation of security may result in immediate termination of the contract. The government has the right to conduct no-notice inspections of the Contractor's work area at any time. The Contractor is responsible for safeguarding all government property and securing any classified information when no longer being used or at the end of each duty day.

9.0 GOVERNMENT-FURNISHED PROPERTY (GFP): For tasks that must be accomplished at Government sites, the Government may provide facilities, such as, office space, office furniture, telephone services, normal office supplies, computer terminals, and other

standard office equipment. Specific items to be provided by the Government will be described in individual delivery/task orders. All automation GFI is Y2K compliant. All hardware and software purchased under cost reimbursable Task Orders will become the property of the government and will be licensed and/or entered into the Government property section as such. The Contractor, Contracting Officer's Representative (COR), or Task Monitor will inventory and account for the government property using the Defense Property Accounting System (DPAS) or another acceptable DOD inventory accounting system and include serial numbers, equipment/software type, locations, etc. Upon termination of task orders, the Contractor shall furnish to the TM a complete inventory of all GFP in his or her possessions under the task order.

10.0 GOVERNMENT-FURNISHED INFORMATION (GFI): the Government will provide All necessary GFI required to perform the work described in delivery/task orders. This information may include, but is not limited to, documentation such as studies, requirements, specifications, reports, deliverable reviews and other material considered appropriate by the Government. This could also included access to protected government automated systems (i.e., databases, web sites, etc.). Decisions on other appropriate GFI will be provided upon review of HBCU/MI requests for specific government information. All GFI is Y2K compliant.

11.0 PACKAGING, PACKING, and SHIPPING INSTRUCTIONS: Packaging and marking of all deliverables shall be in accordance with the best commercial practice necessary to ensure safe and timely delivery in accordance with applicable security requirements. All data and correspondence submitted to the KO, COR or TM shall reference: the contract number, task order number, SOW number, and the names of the KO, the COR, and the TM. All deliverables which include software source code, executables, files, libraries, headers, scripts, or other computer product end items meant for installation on a computer shall be delivered in electronic media that is compatible with DISA's local area network tools. Specific formats will be provided in each task order. Currently, DISA is using the following software products (list is subject to change and/or upgrade), email: DMS or MS Outlook; word processor: MS Word 97; spreadsheet: MS Excel; database: Oracle, Informix, Sybase or MS Access; graphics: MS PowerPoint 97; time management: Lotus Organizer; project management: Microsoft Project; NetWare: Netscape. All other deliverables shall be delivered to the recipients noted on the applicable DD Form 1423.

12.0 INSPECTION and ACCEPTANCE CRITERIA: Unless indicated otherwise in individual task orders, final inspection and acceptance of all deliverables shall be performed at the place of

delivery. The Government requires a period not to exceed 30 days after receipt of the final deliverable item(s) for inspection and acceptance or rejection, unless otherwise specified in the individual task order. All deliverables must be submitted directly to the TM or his designated representative. The TM will monitor the contractor efforts to ensure technical suitability. If the deliverable does not meet the specified criteria, it will be returned by the Government. After notification that the deliverable did not meet the acceptance criteria, the contractor shall re-submit the deliverable within 14 calendar days. Upon re-submission by the contractor, the same acceptance criteria will be reapplied by the Government. If the deliverable does not meet the acceptance criteria a second time the Government might consider the contractor as having deficient performance with respect to the subject task. The Contractor shall permit the Contracting Officer or designated representatives access at any reasonable time to all records, data, and facilities used in the performance of contemplated services.

13.0 OTHER PERTINENT INFORMATION OR SPECIAL CONSIDERATIONS: The development of documentation for items such as studies, analyses, briefings, assessments, network designs, engineering designs, system implementations, site surveys, training material, marketing and information brochures, and reports will be identified in task orders and may involve items originated by the Contractor, as well as, items provided by the government. All deliverable will be provided in using standard DISANet software tools (e.g., MS Word, MS PowerPoint, MS Excel, HTML, etc.). Printing and duplication limits for deliverables will specified in individual task orders.

For software development efforts, the Government gets unlimited data rights which includes the Y2K clause and calls for periodic delivery of source code. The HBCU/MI shall deliver all hardware and software purchased under this contract at the end of this contract. All IT products developed under this contract for the Military Services and Defense Activities must comply with the following:

- The Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR) Architecture Framework, version 2.0 (see www.c3i.osd.mil/org/cio/i3/AWG_Digital_Library/pdfdocs/fw.pdf). The Under Secretary of Defense (Acquisition and Technology) along with the Acting Assistant Secretary of Defense (C3I) and the Director for C4 Systems, the Joint Staff signed a mandate memorandum which stated: " the C4ISR Architecture Framework is a critical element of the Strategic direction in the Department, and accordingly direct that on-going and, planned C4ISR or

related architectures be developed in accordance with version 2.0"

- The Technical Architecture Framework for Information Management (TAFIM) guidelines (<http://www-library.itsi.disa.mil/tafim/tafim.html>).
- Current DOD Joint Technical Architecture (JTA) guidelines (<http://www-jta.itsi.disa.mil/jta/jtamoto2>).
- Applicable The Defense Information Infrastructure Common Operating Environment (DII COE) guidance. See list of documents at <http://spider.osfl.disa.mil/cm/general.html>.
- DOD Data Standards. Current list of procedures and guidelines are available at <http://www-datadmn.itsi.disa.mil/>.
- The Information Technology Standards Guidance (ITSG). See <http://www-itsg.itsi.disa.mil/>.
- Applicable Continuous Acquisition and Life-cycle Support (CALS) standards (<http://www-cals.itsi.disa.mil/core/formal/fps.htm>).
- EC/EDI Standards (<http://www.antd.nist.gov/fededi/DoD/edi-main.html>).
- Public Key Infrastructure (PKI) standards (<http://www.itsi.disa.mil/pki/#activities>).
- Standard Operating Environment (SOE) and Shared Data Environment (SHADE) specifications.
- EPA Energy Star Specification. It is envisioned that MI may be granted authority to purchase a minimal amount of computer hardware for the government under this contract. When applicable, the Contractor shall provide a written statement certifying that all hardware purchases meet the Energy Star requirements for computer equipment (i.e., computers, monitors, Personal Computer Memory Card International Association (PCMCIA) cards, printers, and copiers). HBCU/MI will be advised to familiarize themselves with the EPA guidelines published at <http://www.epa.gov/energystar/>. If applicable, other environmental and energy conservation requirements be specified in individual task orders.
- DISANET Standards. For DISA requirements, the Contractor shall support the engineering, application development,

integration, testing, and training on current or future systems on the DISANet in accordance with guidelines specified in individual task orders. All IT products developed for use on the DISANet will be coordinated with DISA's Information Service Center (DISC) <http://www.disa.mil/disc/disc.html>.

- DOD Standards. When applicable, DOD standards that must be adhered to by Contractor will be identified in individual task orders.

- Year 2000. All IT developed and/or furnished under this contract shall accurately processes date/time data (including, but not limited to, calculating, comparing, and sequencing) from, into, and between the twentieth and twenty-first centuries, and the years 1999 and 2000 and leap year calculations, to the extent that other information technology, used in combination with the information technology being acquired, properly exchanges date/time data with it. To ensure Year 2000 compliance, the Contractor shall, at a minimum, test a representative sampling of the IT, or the same type of IT that will be provided under the contract. Year 2000 compliance testing will be accomplished and documented in accordance with generally accepted commercial standards/practices. If requested, the Contractor shall provide the Government with a copy of such Year 2000-compliance test documentation at no additional cost to the Government. Contractors are expected to be familiar with the DOD Y2K guidelines published at <http://ncr.disa.mil/cio/y2k/cioosd.html>.

[end]